REMARKS

Claims 1 to 16 and 18 are pending in this application. Claims 1, 5, 9 and 14 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Initially, Applicants thank the Examiner for conducting an interview on September 11, 2008. Applicants discussed some of the arguments in this amendment, but no agreement was reached between the Examiner and the Applicants on the claims. However, the Examiner did agree with Applicants' arguments but indicated he wanted to review the arguments further.

Claims 1-16 and 18 are rejected under 35 U.S.C. § 103(a) as being obvious over Deng et al. (U.S. Patent Number 6,701,432, hereinafter "Deng") in view of Walmsley (US Patent Number 7,165,824, hereinafter "Walmsley").

Claim 1 is directed to a processor that includes an authentication buffer is configured to store authentication data including ciphered-network-packet data subject to authentication, network packet data subject only to authentication and not to ciphering and network packet data subject to ciphering and authentication. The authentication buffer includes a circular first-in-first-out (FIFO) arrangement. The processor also includes at least one authentication core coupled to the authentication buffer to authenticate the authentication data from the authentication buffer.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1. In particular, neither Deng nor Walmsley whether taken separately or in combination discloses or suggests at least one authentication core coupled to the authentication buffer to authenticate the authentication data <u>from</u> the authentication buffer (emphasis added).

The Examiner has likened the authentication buffer 406 of Deng to the recited authentication buffer of claim 1 (see page 2 of the Office Action). Applicants respectfully disagree. Deng teaches that "(a)uthentication buffer 406 is a temporary buffer for storing partial results generated by authentication engine 404" (emphasis added, see column 5, lines 49 to 51 of Deng). As understood by Applicants the data flow in Deng is from the authentication engine 404 to the authentication buffer 406 that was authenticated by the authentication engine 404. Thus, authentication buffer 406 stores authenticated data. On the other hand, Applicants recited authentication buffer stores data that will be authenticated and is sent from the authentication buffer to at least one authentication core to be authenticated (see FIG. 1 of Applicants' specification). Therefore, Applicants respectfully submit that Deng does not disclose or suggest at least one authentication core coupled to the authentication buffer to authenticate the authentication data from the authentication buffer.

Walmsley was cited by the Examiner to make-up for the deficiency in Deng in that Deng does not disclose or suggest circular buffers (see page 3 of the Office Action). Applicants submit that Walmsley does not teach at least one authentication core coupled to the authentication buffer to authenticate the authentication data from the authentication buffer nor has the Examiner made such an assertion.

Since neither reference teaches at least one authentication core coupled to the authentication buffer to authenticate the authentication data from the authentication buffer, for at least the reasons indicated above, one of ordinary skill in the art would not have combined the references in the manner suggested by the Examiner. Thus, even if Walmsley were combined with Deng, the resulting hypothetical combination would not disclose or suggest at least one

authentication core coupled to the authentication buffer to authenticate the authentication data from the authentication buffer.

Furthermore, neither Deng nor Walmsley whether taken separately or in combination discloses or suggests that an authentication buffer is configured to store authentication data including ciphered-network-packet data subject to authentication and network packet data subject to ciphering and authentication.

Deng discloses an authentication buffer 406 which is connected to an Authentication buffer 404 (see FIG. 4 of Deng). The Examiner has indicated that Deng teaches "ciphered-network-packet data being stored at the authentication buffer 406) (emphasis added, see page 2 of the Office Action); however, the encryption/decryption engine 402 does not even store ciphered data at the accumulation data buffer 404 as understood by Applicants. Rather, Deng states that "(a)uthentication buffer 406 is a temporary buffer for storing partial results generated by authentication engine 404" (see column 5, lines 49 to 51 of Deng). As understood by Applicants, the authentication buffer 406 only receives authenticated data. In fact, nowhere in Deng does he teach that ciphered data is stored at the authentication buffer 406. Since the accumulation buffer 406 of Deng only stores authentication data it follows that the accumulation buffer 406 does not store network packet data subject to ciphering and authentication or ciphered-network-packet data subject to authentication.

The Examiner has further cited portions of the specification related to FIG. 7 which describes an encryption process to support his assertion (see page 3 of the Office Action). Again, Deng does not indicate that ciphered data is stored in the accumulation buffer 406 in these cited portions (see FIG. 7 and column 10, lines 13 to 67 of Deng). Therefore, Deng does not disclose or suggest an authentication buffer that is configured to store authentication data

including ciphered-network-packet data subject to authentication and network packet data subject to ciphering and authentication.

Walmsley was cited by the Examiner to make-up for the deficiency in Deng in that Deng does not disclose or suggest circular buffers (see page 3 of the Office Action). Applicants submit that Walmsley does not teach an authentication buffer that is configured to store authentication data including ciphered-network-packet data subject to authentication and network packet data subject to ciphering and authentication nor has the Examiner made such an assertion.

Since neither reference teaches that an authentication buffer is configured to store authentication data including ciphered-network-packet data subject to authentication and network packet data subject to ciphering and authentication, for at least the reasons indicated above, one of ordinary skill in the art would not have combined the references in the manner suggested by the Examiner. Thus, even if Walmsley were combined with Deng, the resulting hypothetical combination would not disclose or suggest that an authentication buffer is configured to store authentication data including ciphered-network-packet data subject to authentication and network packet data subject to ciphering and authentication.

Independent claims 5, 9 and 14 having corresponding features to claim 1. Applicants submit that the cited references should also be withdrawn with respect to claims 5, 9 and 14 for at least the same reasons as claim 1.

Applicants submit that all dependent claims now depend on allowable independent claims.

For at least the foregoing reasons, Applicants respectfully request withdrawal of the art rejection.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

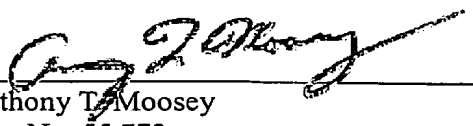
Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

All correspondence should be directed to the address below. Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 123.

No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: INTEL-019PUS.

Respectfully submitted,

Date: September 12, 2008



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